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### Annual Meeting

**Who: All W&PA Members**

**When:** Saturday, Feb. 9, 2008

**What time:** 10:00 a.m.

**Where:** Water & Power Headquarters (John Ferarro Bldg.)  
111 N. Hope St.,  
A-level Conference Center

#### **Agenda:**

- ◇ President, officers, and committee chairs - review of prior year & goals for current year.
- ◇ Membership elections of Board of Directors.

**Note:** Park in Customer Parking, **Gate 6** (on Hope St., just south of Temple)

Bring your Water & Power I.D. badge (active or retired) if you have one.

*Vincent J. Foley,*  
Membership Chairman



*Richard Dickinson,*  
President

I'm writing this from Savannah, Georgia, where during my ten-week stay, the water woes of California were out of my mind, and thousands of miles away until I started reading the local newspapers. Around me are dense green forests of pine trees. The land here seems to have standing water everywhere I look. Rivers and creeks run far and wide. Near me are large fast flowing rivers like the Ogeechee and the Savannah, and smaller rivers like the Tivoli and Belfast. So, I was surprised to read about a water crisis in Georgia. The state is in the midst of one of its most severe droughts.

When I arrived in Southeast Georgia in early November, Georgia water officials warned that Lake Lanier, a 38,000-acre reservoir that supplies more than 3 million residents with water, was less than three months from being depleted, and many of Georgia's smaller reservoirs were in even worse shape. Moreover, experts warned that if Georgia did not receive adequate rainfall over the next three to four months, drought conditions would likely expand statewide by spring, and 2008 will likely be worse than 2007. (Continued on page 2)

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**HAPPY NEW YEAR**

# Southwest Water Woes

President's Message (Continued from page 1)

Over one billion gallons flow downstream from Lake Lanier every day. Much of it flows southwest to Alabama and eventually to Florida. The Army Corps of Engineers controls water in the lake, and it bases its water releases on two requirements: the minimum flow needed to operate a coal-fired power plant in Florida and mandates to protect two mussel species in a Florida river.

The water shortage is having a polarizing effect on Georgians. Some want to limit growth and protect the environment, others want to take what's needed to preserve upstream businesses and homeowners, leaving the downstream populations to fend for themselves. One Republican lawmaker from Duluth said, "We've learned from this what a blunt weapon the Endangered Species Act has become. We need to understand this lake was created not for mussels but for people."

In September virtually all outdoor watering was banned through the northern half of the state. Restaurants have been asked to serve water only at a customer's request and the governor called on Georgians to take shorter showers. But Lt. Gov. Casey Cagle told the press that "This is not something we can conserve our way out of." In the City of Savannah (which is in a drought that is not quite as desperate as that of Atlanta) where I live, the city started giving away some free, low-flow toilets. Atlanta is now looking at placing water-saving fixtures throughout metro Atlanta. These are measures Los Angeles had adopted many years ago.

Georgia governor Sonny Perdue declared a state of emergency for the northern part of the state, and he asked citizens of the state to pray for rain and to implement conservation measures. Perdue asked President Bush to exempt Georgia from complying with federal regulations that dictate the amount of water released from Georgia's reservoirs to protect federally protected mussel species downstream.

This all sounded a little like California's water woes that include problems with the Delta Smelt. **Water is a finite but vital resource everywhere. For decades, the parched West has been balancing the various competing interests (urban, ag, environment) that Georgia now must deal with. Los Angeles has added one million more residents in the past three decades, but it still uses the same amount of water. That tells me that the West may be ahead of Georgia in developing water conservation policies.** But that also tells me that new challenges will force all policy makers to adapt and develop new strategies that were scarcely envisioned and are quite different from those of decades past.



## Legacy of LeVal Lund

It was my good fortune to have known LeVal Lund as a friend, colleague and coworker. It is the good fortune of all Los Angeles residents (past, present, and future) to have had LeVal working tirelessly on their behalf to bring them safe, clean, reliable water. Dams are safer. Our water infrastructure is more reliable because of LeVal's efforts. Policies and strategies that promote the wise use of water are stronger.

LeVal was a walking encyclopedia about everything connected with California water. Even while one was driving about Los Angeles or skiing with him at Mammoth Lakes, LeVal would never miss an opportunity to point out something about the City's water legacy, its history or its infrastructure. LeVal was a public servant in the finest sense of the word. He had a passion for protecting the city's water interests, insuring high standards of engineering, conserving our precious water resources, and insuring the integrity of the overall complex water system we have in California. Water is vital to the economic progress of Los Angeles.

I think the finest tribute we could give to LeVal would be to continue to exhibit his same passion in order to preserve and protect one of the finest water systems on the face of the earth.



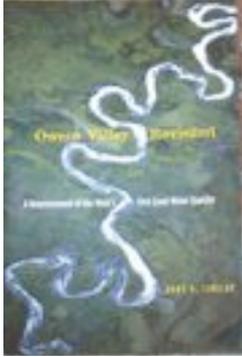
# Book Review

## Owens Valley Revisited

by Prof. Gary D. Libecap.

Stanford University Press 2007

*Written under a National Science Foundation Grant.*



**Conventional wisdom** – that socially acceptable view of facts that is often wrong – claims that Los Angeles “stole” the water and land from Owens Valley farmers, acquired much of it through secret dealings from the unaware, disproportionately represented, and turned an agricultural wonderland into a dried up dustbowl. In *Owens Valley Revisited*, using a balanced analysis, Professor Gary Libecap examines the conventional wisdom and compares it with the facts. He traces the history of the Los Angeles acquisitions and the Owens Valley/Mono Basin transactions, the effect of changing environmental concerns, and the judicial and legislative reallocation of water rights. In the course of analyzing the transactions, he shows how little the myths of Los Angeles treatment of the Owens Valley farmers relate to the evidence. He finds no “theft,” little secrecy, and no agricultural wonderland. In fact, for the majority of land and water purchases, the farmers dealt with the City using business cooperatives, formed an irrigation district and obtained the assistance of the state legislature, the governor, the press, and even dynamite, in attempts to strengthen their bargaining positions.

More importantly for the reader, Professor Libecap analyzes the transactions for their long-term effect generally on water reallocations from rural to urban areas. He notes the long-term effect of the misperceptions of the so-called “Owens Valley Syndrome” and the limits it has placed on future such transfers. At a time when the need for rural to urban water transfers is greater than ever, the fear of “Owens Valley Syndrome” has become a serious, stumbling block.

The value of *Owens Valley Revisited* is twofold. First, it provides a short but quite complete history of the City’s water acquisitions in the Owens Valley and Mono Basin, including the major patterns and incidents, and a summary of the court cases reallocating water rights. Second, it provides a detailed analysis of the facts regarding those activities using statistical and economic comparisons, showing how different the facts are from the myths and noting, in passing, the dearth of evidence for the myths.



*Review  
submitted by  
David Oliphant*

Libecap begins by reporting the standard vilification of the LADWP by writers such as William Kahrl, and the press, regarding “theft” of the water, ruining the farming, and making a colony of the Owens Valley. The professor presents it so well that in reciting the positions of these critics, it sometimes sounds as though he is the one presenting the criticisms. Then, he analyzes each of the claims. For example, Libecap says Kahrl “begins by writing glowingly of the valley’s agricultural potential in the early twentieth century, which he compares favorably with that of the Imperial Valley.” But, Libecap states: “Owens Valley was a marginal farming area with comparatively low agricultural returns in comparison with other Great Basin regions and the rest of California. Most farmers appear to have been delighted with the opportunity to sell their properties and to sell to a rich city like Los Angeles. They were not “unwitting” and Los Angeles did not “quietly” or secretly buy up most of the properties in the valley. Rather, Owens Valley farmers shrewdly attempted to organize as a single bargaining group to increase their negotiating power with the LADWP in the early 1920s when the city began to buy up the most valuable farmland.”\*

Libecap analyzes two factors that he states have never been systematically analyzed: the underlying negotiations between the Board of Commissioners and the farmers, and what happened to the economy and population of the Owens Valley after the ownership of land and water passed to Los Angeles. (continued on page 4)

📖 Some books are to be tasted, others to be swallowed, and some few to be chewed and digested; that is, some books are to be read only in parts; others to be read but not curiously; and some few to be read wholly, and with diligence and attention. Some books also may be read by deputy, and extracts made of them by others. *Francis Bacon, 1561-1626*

(continued from page 3)

Looking at the negotiations, Libecap observes that the transfer of water from rural to urban use is a transfer from low-value to high-value water. The farmers wanted payment at the high value of the water to Los Angeles and they used all possible resources to get that value. Using tables comparing farm valuations and final prices, he shows how the prices paid were reasonable. In addition, to protect itself politically, the LADWP was forced to buy town properties which had no value from the standpoint of water acquisition. In the heart of the depression, when properties elsewhere were selling at 1929 depressed values, Libecap notes that the City paid 1923 pre-depression values for the town properties.

While town property owners complained that taking the water was lowering the value of their land, in graphs comparing town values in Bishop with a like town in Lassen County (also in the Great Basin), the values compared favorably. He points out that if values were declining, the population should also have declined, yet a table comparing the five counties of the Great Basin shows that while there was a small decline from 1925-1935, it was not major and by 1954 the population had increased significantly. There was no evidence the farm economy was devastated by the LADWP or the valley turned into a desert.

For the City, the cost benefit of Owens Valley water when compared to other water prices (e.g. Colorado River) was very favorable. However, the professor points out that subsequent legislation and litigation, following changes in environmental views, the Mono Lake litigation, groundwater pumping challenges, and the Owens Lake dust problem, has reduced the cost benefit significantly.

Professor Libecap discusses the potential social gains from rural to water transfers. Most western cities, including Los Angeles, San Diego, Phoenix, Denver, and Tucson, do not have sufficient local water sources to meet growth in urban demand. Cities provide opportunities for greater productivity, growth, more jobs, higher salaries, education, and upward mobility. The Professor feels moving relatively small amounts of water may be sufficient to address major portions of urban demand, but the negative effects of the Owens Valley Syndrome make this much more difficult. The responses to the changes in the Owens Valley and Mono Basin should not be a template for future transfers.

*Owens Valley Revisited* fills an important need for anyone who wants a balanced picture of the water history of Los Angeles in the Owens Valley and Mono Basins. It is concise and yet, thorough. For any fair commentary on the LADWP Owens Valley history, no writer should begin without first reading Libecap's *Owens Valley Revisited*.

\*The Great Basin includes Inyo and four other counties with similar agricultural characteristics. 🐾

## Letters Published in Newspapers *May* Reproduce the Writer's *misinformed* Opinions as Facts.



### Readers, Beware

By David J. Oliphant

Truth, sad to say, is a weak substitute for popular belief. In a letter to the Los Angeles Daily News and published in the November 8, 2007 edition, a Palmdale woman blamed William Mulholland's building of the "California Aqueduct" for destroying the "110 mile-long" Owens Lake and creating the Owens Valley dust problems. That she had the **wrong aqueduct** (Mulholland built the Los Angeles Aqueduct, **not** the California Aqueduct which was built in the 1960s) is an obvious error. But more grievous is the total misunderstanding of the history or the significance of Mulholland's achievements.

First, even if the Los Angeles Aqueduct had **never** been built the Owens Lake would **still** have dried up.

- ▶ Before Los Angeles set out to acquire the Owens Valley water rights, more than **250 miles** of canals had already been dug by Owens Valley farmers. [1]

- ▶ Before Los Angeles had even begun to purchase the water rights, in **August 4, 1904**, the Inyo Register reported that the lake level had shrunk to less than 70 square miles from its 1870 size of 110 square miles and predicted it would be a memory in 15 years. [2]

- ▶ In a Huell Howser California Gold television production dealing with the present DWP lake rewatering program, an *Owens Valley speaker* noted that by 1900, well **before** the Los Angeles Aqueduct construction began, as a consequence of some 400 farms diverting the water, in some months of the year the Owens River had **already stopped** reaching the lake. [3]

(Continued on page 5)

# **NEVER** Underestimate the ~~Wisdom~~ Wisdom of Your Readers;

*You squander your opportunity to develop credibility and influence the opinions of others, or to become a reliable resource to inquiring minds,*

*(Continued from page 4)*

Second, from the 1870s, Owens Valley newspapers had reported on Owens Valley dust problems.[4] At that time, the conventional wisdom was that allowing fresh water to flow into the saline lake was the worst kind of water waste. In a 1917 study[5], the Inyo County Board of Supervisors decried as waste “those holding riparian rights to streams... who... woefully waste the water by letting it merrily run its natural course through their lands and further add to the high water table and alkali course of the valley lands.”

When the acquisition of rights of way across federal land by Los Angeles to build the Aqueduct was approved by President Theodore Roosevelt, it was done for the then progressive reason of the greatest good for the greatest number.

Contrary to conventional wisdom, the Owens Valley was not a great agricultural resource.[5] The climate tends to extremes with short growing seasons and differential results. It is better land for cattle ranching and growing alfalfa. Many of the farmers were glad to sell their land to the City at higher prices than would otherwise have been possible rather than continue subsistence farming. On the other hand, in Southern California and the Central Valley, it is possible to have three growing seasons and a more consistent and greater variety of crops.

Without the water that Mulholland brought to Los Angeles, a world class city, it is doubtful this area would have developed as it did. The jobs and productivity, universities, movie and television industry, aerospace industry, harbor, rail, and airports would not have become today’s commercial giants. Moreover, the Los Angeles Aqueduct provided the example which served as a precedent for building the Colorado River Aqueduct (also designed by Mulholland), and the later California Aqueduct which incidentally provides water for Palmdale where the letter writer referred to above lives. It is fair to assume that Southern California would not have developed into the vibrant productive community that it is without the water.

LADWP is dealing with the dust problems. It may be subject to criticism for continuing the problem it inherited but it has made a start and is attempting to deal with it. The technology for rewatering the Owens dry lake is brand new and untried. It is questionable whether left to the early farmers who diverted the water in the first place, the people would ever have had the money or the desire to restore the Owens Lake. On the other hand, the City is more susceptible to political pressure to solve the problem and is in a better position to obtain the money to do so with Board members, a City Council and a Mayor who are environmentally inclined.

Before members of the public attack Mulholland, it would be wonderful if they would for once consider the benefits and opportunities the aqueducts have given them out there in Palmdale, here in Los Angeles and in all of Southern California. 🐘

*Written by  
David Oliphant  
This letter was sent  
to The Daily News.*



## Footnotes:

[1] *My Forty Years at LADWP*, p.134  
James Wickser 1999

[2] *Inyo Register*, August 4, 1904  
cited by naturalist David E. Babb in  
an article entitled *History of Early  
Water Diversions and Their Impact on  
Owens Lake* (The History of Water:  
Eastern Sierra Nevada, Owens  
Valley, White-Inyo Mountains, White  
Mountain Research Station  
Symposium Volume 4, University of  
California 1992)

[3] *Visiting With Huell Howser #943*  
Owens Dry Lake 2001

[4] Fn. 2 Inyo Board of Supervisors  
1917 study cited in David E. Babb  
article.

[5] *Owens Valley Revisited*, p.27, 35,  
Gary Libecap Ph.D. (2007), *William  
Mulholland and the Rise of Los  
Angeles*, p.123 Catherine Mulholland  
(2002)

# Elements of 2007-2008 Power System Budget Energy Efficiency

By: Kent Noyes, Tom McCarthy & John Schumann

## Renewable Energy and Transmission Reinforcement

LADWP's goal is to expand its supply of renewable energy along with other alternative power programs and energy efficiency measures designed to produce clean energy and reduce greenhouse gas emissions that contribute to global warming.

To support the renewable portfolio standard (RPS) goal of 20 percent renewables by 2010, the budget identifies \$181 million for 2007-08, and increases to \$599 million in 2009-10. The majority is for capital costs associated with building and upgrading transmission systems and development of solar, geothermal, wind and other renewable projects. The budget includes \$30 million for LADWP's solar rebate program—more than double the level funded 2006-07—reflecting a target goal of 280 megawatts of solar installations by 2017 to meet recent state legislation SB1, also known as the Million Solar Roofs Plan.

## ❖ Energy Efficiency ❖

Along with renewable generation, the LADWP plans to spend \$79 million—more than double the current year level—for energy efficiency programs. The measures are estimated to save 275 gigawatt-hours annually, which is greater than LADWP's projected growth, and eliminate nearly 200,000 tons of CO<sub>2</sub>, which is the equivalent of removing 40,000 cars from the road.

## Reliability

The Power System has made a major commitment to improving system reliability. A detailed description of the improvement programs is included on the Department's website but some of the highlights are as follows:

### ❖ Reliability Budget ❖

The budget for this next year has been increased by \$115 million for programs needed to improve system reliability. Future budgets have also been increased each year for the next 5 years to make reliability improvements. The total amount committed to reliability improvements over the next 5 years is approximately \$1 billion over and above the amounts that were already approved in previous years.

## ❖ Reliability Program Highlights ❖

Some of the highlights of the reliability program are to increase the pole replacement program to reduce the current replacement cycle of 100 years to 60 years; increase cable replacement from 40 miles per year to 60 miles per year to reduce the replacement cycle from 105 years to 75 years; make permanent repairs to temporary and open circuits within 90 days; and to replace one underground transmission cable each year. There is also a commitment to make timely additions to the system to accommodate load growth. There is a 58,000 man hour backlog in this area.

*(Continued on page 7)*



## Long-Term Issues

(Continued from page 6)

### ❖ Labor Resources ❖

The additional reliability work will be handled by a combination of increased staff and contracts. Plans include adding 182 additional personnel this year, 125 next year, and 30 more in two years for a total increase of 337. The increases will be in many classes including the line series and the engineering series. Programs are being developed with the unions to increase the number of trainees in our programs.

### ❖ Proposed Rate Action ❖

During a presentation to the Board, LADWP officials proposed a series of rate actions designed to address the long-term power reliability issues as well as fund ongoing water quality improvements required to meet federal and state regulations. The proposed rate changes were considered by the Board in the Fall following a 120-day period of public review and comment and will also be subject to an independent review administered by the City's Chief Administrative Office and Chief Legislative Analyst's Office.

LADWP officials proposed funding a multi-year Power Reliability Program through a new power reliability surcharge as well as a base rate increase - the first base rate increase since 1992. The average residential customer using 500 kilowatt-hours (kWh) per month would see an increase in their bill of \$1.75 per month effective Jan. 1, 2008 under the proposal and additional increases of approximately \$1.75 per month effective July 1, 2008 and July 1, 2009. Altogether, power rates would increase 9 percent over 3 years.

## BURNING WATER ISSUES

### Perata Bond Measure Fails on Senate Floor *Negotiations Continue to Get Compromise Bond Package with Bipartisan Support*

Lawmakers and stakeholders continued to negotiate on a compromise package that could gain bipartisan support. The deadline for placing a bond package to provide funds to upgrade the state's water facilities on the February 2008 ballot was Oct. 16, 2007.

The Association of California Water Agencies Executive Director Timothy Quinn said he remained hopeful an agreement could be reached. "We believe real progress has been made the past few days and continue to believe a bipartisan solution that provides for a comprehensive package is our best course," Quinn said. "ACWA will continue to work toward that end."

A water bond proposal backed by Senate Democrats failed passage on the Senate floor on Oct. 9. The \$6.8 billion measure failed on a 23-12 vote, four votes short of the 27 needed for passage.

### ACWA State Legislative Outreach Advisory

After the vote, Senate President Pro Tem Don Perata said he would start the process of gathering signatures to place a bond initiative on the November 2008 ballot.

Republicans were said to be considering their own initiative after the \$9 billion bond package they support failed to clear the Senate Natural Resources and Water Committee on October 9. That package, proposed by Governor Schwarzenegger and supported by ACWA, contains more than \$5 billion in funding for surface storage projects. ☺



**“Even with these increases, LADWP electrical rates will remain extremely low — in some cases more than 50 percent less than the average monthly rates of the state’s investor-owned utilities including PG&E, SCE, and SDG&E,”** the General Manager said. For instance, after the *proposed* first 3 percent increase in January 2008, LADWP customers using 500 kWh would pay 11.39 cents per kWh, while customers of the state’s three major investor-owned utilities (IOU) average monthly bills of 14.12 cents per kWh. Customers using 2,000 kWh will be paying 11.54 cents per kWh, while the rates of the three major IOUs average 23.84 cents per kWh. LADWP also ranks second lowest when compared to five other municipally owned utilities (Glendale, Burbank, Sacramento and Anaheim), which average 13.39 cents per kWh. ☺

# MEMBERSHIP



*Catherine Mulholland  
Director Emeritus*

During the 2007 summer, responding to health needs, Board Member Catherine Mulholland sold her home and moved to a retirement community. While she continues to write and enjoys reading as ever, deteriorating vision makes it more difficult, and she will be unable to attend Board meetings as in the past.

In October, in recognition of her support for the Associates (including serving as Vice President) and her many activities on behalf of the organization, and the history of Los Angeles and the San Fernando Valley, and water in general, our Board voted to retain Catherine as a Director Emeritus of the Water and Power Associates.

We will miss her but we plan to keep her informed as always of our activities. 🐦



*Vincent J. Foley,  
Membership Chair*

## WHEN IT RAINS, IT POURS — FOR THE MOMENT

The old joke runs, “*God made meteorologists so that people would believe what economists were predicting.*” The local weather reporters/forecasters — Johnny Mountain, Fritz Coleman, Ross King, and their ilk — have predicted impending rainstorms for so long they could be siblings of the boy who cried “Wolf!” Paul Moyer of KNBC is notorious for his storm-of-the-century predictions and warnings of dire floods that fizzle into drizzle. However, the current rainfall season (since July 1, 2007) hasn’t been all that bad. Several light rainstorms have so far kept the season average near the normal range.

The real boost came from the triple storm that hit the Pacific Coast the weekend of January 4-6, 2008. As of January 9 the total rainfall for Los Angeles was 5.95 inches, 1.44 inches above normal. Of course, what comes out of the tap depends on the supply of what comes into it. As of January 9 the season snowpack at Mammoth Pass was 50% of normal. Several measuring systems in the Southern Sierra are at normal or slightly above it. So the 2007-2008 rainfall season is considerably better than last year’s record low — at least *at this time*.

Depending on being optimistic or pessimistic, the rainfall and snowpack can be seen as half full or half empty. Whichever way it goes depends on what the remaining season has in store for us. Given the unpredictability of our semi-arid environment and the continuing possibility of drought, crossing your fingers and doing a rain dance may be just as effective as the wishful thinking of those TV weather forecasters. 🐦

*By  
Abraham Hoffman*



*Note: The rate increase has not been approved, so nothing went into effect January 1. DWP is to report back to the Council with responses to several questions regarding the proposed rate increases. This will probably occur after the voters have a chance to vote on the proposed communications users tax.*

### Water News Contributors:



*Thomas J. McCarthy*



*Kent Noyes*



*John W. Schumann*

# In Memoriam

*Biographical information  
coordinated and compiled  
by Fred Barker, LADWP*



## **Bio of Le Val Lund, Jr.**

1923-2007  
Lifelong Public Servant

Born: February 24, 1923 (French Hospital, Chinatown, L.A.) (French immigrants were very important to LA development in the 1850s to the early 1900s, including owning the LA City Water Company, the private forerunner of the DWP.)

Died: November 30, 2007, at home in Los Angeles, at about 9:35 A.M. (age 84. His death was due to complications of lymphoma, which he battled valiantly for several years.

## **Family:** Le Val's parents were

Le Val Lund Sr. and Grace Brown Lund. Father and paternal grandfather were both doctors who practiced in L.A. Both practiced in the Roosevelt and Taft Buildings downtown. Lund's paternal grandparents came to Los Angeles from Medina, New York in 1892 for health reasons. Le Val lived his entire life in the house his parents built before he was born (located in Los Feliz; it is less than a mile from the Mulholland Memorial Fountain at Riverside Drive.) He is survived by his sister Ethel Pattison of Manhattan Beach, niece Le Valley Pattison, grand-nephew Logan Le Val Pattison, and cousin, Sheila Brown of Highlands, New Jersey. He had no children; never married.

## **Education:** Franklin Avenue

Elementary, Thomas Starr King Jr High, John Marshall High (graduated Winter 1941). Lund was selected Alumnus of the Year in 2003 for his contributions to Marshall and the Marshall Alumni Association, in particular to the Budget Committee. Active in sports: track and field, swimming, basketball and football. Went to **Occidental College** and then **Caltech** in the Navy V-12 program. Served in the **Navy Seabees** as a Lt. JG in the Pacific in WW2 or shortly after, including spending time on Okinawa involved in post-war reconstruction. (Lund returned to Okinawa recently to revisit some of the construction projects.) B.S. in Civil Engineering from **Caltech** (1947) and M.S. in Civil Engineering from **USC**. Lund served two terms as president of the **Caltech Gnome Club**. Originally a fraternity founded in 1897, it is Caltech's oldest campus service club, and is dedicated to the principles of service, fellowship, courage, loyalty and truth. Lund was also an active volunteer and supporter of the **Caltech Alumni Association** (on its Board 1992-93), the **Caltech Summer Undergraduate Research Fellowship Program**, **Caltech Associates** and with class reunions.

## **Career:**

Lund was hired by **DWP** in July, 1947. He retired after almost 42 years' service in April 1989. Lund worked his way up the ladder, promoting to Associate Engineer in 1950, Waterworks Engineer in 1955, Senior Waterworks Engineer in 1965 and Principal Waterworks Engineer in 1971.

During the span of his career, Lund worked on a huge variety of projects, including the second Los Angeles Aqueduct (1965-70); the construction of Los Angeles Reservoir (1974-77) following the San Fernando Earthquake of 1971; the analysis and upgrading of other hydraulic fill earth dams, including Silver Lake, Elysian, Eagle Rock, Franklin Canyon and Santa Ynez; planning, design and construction of the Los Angeles Aqueduct Filtration Plant in Sylmar; directed several divisions, including Aqueduct and Engineering Design. Lund also worked in Water Executive and Water Operating Divisions as assistant division head. He was involved in directing such activities as the design, construction and operation of trunk lines, pumping stations and tanks; material testing laboratories, reservoir surveillance, geotechnical investigations and water distribution facilities.

**In this work Lund was serving the public safety and fire protection needs of a very large city. He was active in developing new methods of soil and dam analysis, with emphasis on protecting water supplies and public safety. (continued on page 10)**

In retirement Lund attended board meetings of the Metropolitan Water District and the Colorado River Board on his own, to keep informed of issues affecting Los Angeles and to report to Water and Power Associates so they could advocate on behalf of DWP on issues that those entities had jurisdiction over.

Lund was an active member of the Association of California Water Agencies (ACWA), and in particular was a founding chair of ACWA's water quality committee, which grew out of a Water Quality Task Force, which he also headed. In this capacity he was instrumental in bringing disparate parties together to address the emerging problems facing the California water industry and realized that everyone in the state, both urban and agricultural water users, needed to work together to solve the state's water problems. His foresight and persistence in involving both was critical to finding solutions and making water regulations useful and practical to all Californians. One aspect of his character was the skill he had to run meetings efficiently so that everything important was addressed, action items were assigned and followed up on, and everyone had ample opportunity to express their opinions. Many who were part of the task force and the committee have remarked that his ability to run a meeting properly was unsurpassed.

He was also a member of the American Waterworks Association and the Earthquake Engineering Research Institute.

Lund was involved in the creation of the **Greater Griffith Park Neighborhood Council** and, being an 80 year plus resident of Lowry Road, was a beloved friend to his neighbors, who will greatly miss him.



*(continued from page 9)*

The citizens of Los Angeles have lost a valuable and tireless advocate with the death of Le Val Lund.

*A celebration of Lund's life took place Saturday, December 8 at 11:00 AM at the Caltech Athenaeum in Pasadena.*

Lund was the repository of much of DWP's history, and was a source for people inside and outside the Department who needed to know the reasons behind why the system was built the way it was, and what had come before. A few examples: during recent construction of the MTA Gold Line to Pasadena, portions of the original Zanja Madre ("Mother Ditch") were uncovered in the North Broadway Cornfield area, and Lund worked to not only preserve a section of the brick-enclosed ditch but to make it so the public could view it and learn a little of L.A.'s early water history. Lund was known for taking visitors to Olvera Street to show them the small water museum, and was an important source for the 2002 celebration of the DWP's Centennial.

Lund enjoyed the outdoors and activities such as hiking and skiing. He was an active skier into his 80s, and could ski longer than people half his age. He loved to garden, and in particular was devoted to his orchids. He was an active member and supporter of the Hollywood-Wilshire YMCA and the USC School of Engineering.

Lund, beyond his technical knowledge, was known by his co-workers as generous, fair and enthusiastic. He was interested in people and the world around him, and was curious and helpful in all situations. He treated people well. In that way, he was an "old-fashioned" manager.

During the summer of 1977, when the City's worst drought ever was approaching two years in duration, Lund was the co-leader (along with another DWP Civil Engineer Walter Hoyer) of a special task force of DWP employees charged with the development of a water conservation plan for the City of Los Angeles. The task force provided staff support to Mayor Tom Bradley's Blue Ribbon Committee on Water Conservation and spent many long days and weekends performing research and providing information to the Committee. The Committee met twice per week in the evening, and most of those meetings ended close to midnight. The task force ultimately produced the City's first water conservation plan and the language for the first water conservation ordinance, which is still in effect today. The conceptual basis for today's extensive water saving programs including low-flush toilets, low-flow showerheads, building code revisions, drought tolerant landscaping, commercial water audits, and many other strategies, was developed under Lund's guidance more than 30 years ago. After Lund's death, members of that task force recalled the sense of accomplishment all of the members of the team felt and how Lund's efforts are still paying dividends today. As a point of reference, Los Angeles has added about one million residents since 1970 but the annual water consumption of the city has remained flat. *(continued on page 11)*

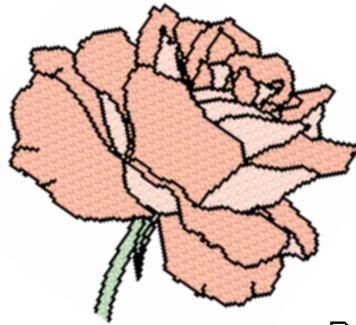
## Note on the

### San Fernando Earthquake:

*(continued from page 10)*

Most of the early 20<sup>th</sup> century dams built by the DWP were hydraulic fill earth dams. They were built by placing earth using earth-water slurry, then allowing the water to drain out. This type of dam-building method, while easier and cheaper than other methods, resulted in dams that were subject to liquefaction and slumping in earthquakes.

During the San Fernando earthquake on February 9, 1971, the Lower Van Norman Reservoir dam was heavily damaged and slumped about 10 vertical feet. Fortunately, knowing this tendency about earth dams, the DWP had lowered the normal high water level in the reservoir as a precaution, and although the dam was damaged, it was not overtopped by the water and did not fail catastrophically. About 10,000 residents below the dam were evacuated immediately after the earthquake, and the dam was taken out of service two weeks after the earthquake, and the reservoir was emptied a month later. This event prompted changes to be made in dam safety codes by the **California Division of Safety of Dams**. **Lund was the leader of the DWP's efforts to analyze, modify or replace its earth fill dams** in the years following the San Fernando Earthquake. Lund and the DWP were assisted by the noted seismologist **Charles Richter**, who, like Lund, was associated with Caltech.



## Retirement:

After retiring in 1989, Lund continued his career in civil engineering, in particular the performance of urban lifelines, such as water supply systems, sewage systems, communication systems, transportation facilities and gas and electric utilities during and after earthquakes. He traveled on behalf of the **American Society of Civil Engineers (ASCE)** to Kobe Japan, Turkey, El Salvador and other countries and within the US following earthquakes to study the damage to urban infrastructure and develop methods and strategies for systems more robust and less susceptible to damage from seismic events.

He has had numerous papers and articles published about his research. He also lectured at and helped organize numerous events at which Lifeline Earthquake Engineering was discussed with engineers and others from around the world. He worked as a consultant to private companies and government agencies in the areas of water resources and lifeline earthquake engineering. **If anything, his level of professional activity in civil engineering and advocating for Los Angeles increased after his retirement.**

Lund was a longtime Board member and several-time president of **Water and Power Associates**, a non-profit public interest group dedicated to advocating for the interests of the citizens of Los Angeles in the area of water and power issues. It is composed of active and retired DWP employees, academics, historians and community members. One of the WPA projects that Lund was most passionate about was the creation of a **Water and Power Museum/Learning Center**, similar to the Flight Path Museum at LAX. Lund had already made donations from his personal collection toward this museum, some of which have been on display in the lobby of the DWP headquarters in an exhibit dedicated to the 150<sup>th</sup> anniversary of Mulholland's birth in 1855. Lund also was involved with the WPA in informing citizens of possible ramifications of splitting the city (San Fernando Valley secession.) He also assisted in efforts to revise portions of the city charter. 🌹



Le Val Lund at the Water and Power Associates, Inc. Board Meeting, October 2007.

It has been said that when a person dies, a book is lost.  
When LeVal died, we lost an encyclopedia.